



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/349,347	07/07/1999	CATHERINE ROSENBERG	585-1003	6531

7590

03/06/2003

WILLIAM M LEE JR
LEE MANN SMITH MCWILLIAMS
SWEENEY & OHLSON
PO BOX 2786
CHICAGO, IL 606902786

EXAMINER

ABELSON, RONALD B

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/349,347

Applicant(s)

ROSENBERG ET AL.

Examiner

Ronald Abelson

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,21,42 and 43 is/are allowed.
- 6) ☒ Claim(s) 1-6,13,19,22-28,35,41 and 44 is/are rejected.
- 7) ☒ Claim(s) 7-12,14-18,29-34 and 36-40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2666

Claim Rejections - 35 USC § 102

1. Claims 1-6, 13, 19, 22-28, 35, 41, and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis (US 6,157,654).

Regarding claims 1, 13, 23, 35, Davis teaches a method and apparatus for an integrated connection admission control (CAC) (fig. 1 box 12) and bandwidth on demand (BoD) (fig. 1 box 16) system for allocating the resource of a common medium uplink of a multiple access (MA) asynchronous network (col. 2 lines 7-14).

The CAC comprises a means for allocating static resource to all virtual connection (VCs) or groupings of VCs accepted by the CAC (trBW, col. 5 lines 8-11, 38-40, Table 1) and means for booking dynamic resource to the VCs that require guaranteed dynamic resource (ssBW, col. 5 lines 22-24, 38-40, Table 2).

The BoD/WFQ Control comprises means for allocating dynamic resource to VCs or to groupings of VCs requesting dynamic resource in such a way that all VCs or grouping of VCs requesting dynamic resource are dynamically allocated resource up to at least the guaranteed dynamic resource which has been booked for them by the CAC (col. 5 lines 40-42, spare bandwidth, col. 6 lines 57-61).

Art Unit: 2666

Regarding claims 13, 23, 35, in addition to the limitations in claim 1, Davis teaches when the requested resource from the VC or group of VCs is less than or equal to the booked dynamic resource for the VC or group of VCs, the BoD allocates the VC or group of VCs all the requested resource, when the requested resource from the VC or group of VCs is greater than the booked dynamic resource for the VC or group of VCs, the BoD allocates the VC or group of VCs the booked dynamic resource and additionally the BoD allocates the VC or group of VCs a share of the remainder of the requested resource, from the remaining resource capacity of the common medium uplink (fig. 3 box 1-4, col. 3 lines 23-35).

Regarding claims 19, 22, 41, and 44, the means for allocating static resource in the CAC and the means for allocating dynamic resource in the BoD are constrained to allocate resource in such a way that traffic on the common medium access uplink is shaped by the integrated CAC and BoD resource allocation system (col. 2 lines 46-52).

Regarding claims 2 and 26, the groupings of VCs are within the same subscriber access unit (SAU) or terminal (source behavior, col. 1, lines 12-18).

Art Unit: 2666

Regarding claims 3 and 24, the means for allocating static resource in the CAC allocates static resource to a VC when a VC is set up for the duration of the connection associated with the VC (col. 4 lines 25-32, col. 5 Tables 1&2, note trBR, the bandwidth associated with CBR and rtVBR has a required minimum value).

Regarding claims 4 and 25, the means for booking dynamic resource in the CAC reserves booked dynamic resource to a VC when a VC is set up for the duration of the connection associated with the VC (guarantee a certain sustained cell rate, col. 5 Table 2, lines 59-63).

Regarding claims 5 and 27, wherein the means for allocating static resource in the CAC allocates static resource to a group of VCs and changes the amount of static resource allocated to a group of VCs when new connections are set up or connections are released within the group (fig. 4, boxes 1, 5-7, col. 7 lines 36-39).

Regarding claims 6 and 28, the means for booking dynamic resource in the CAC books dynamic resource to a group of VCs and

Art Unit: 2666

changes the amount of booked resource allocated to a group of VCs when new connections are set up or connections are released within the group (fig. 4, boxes 1-4, col. 7 lines 36-39).

Allowable Subject Matter

2. Claims 20-21, 42 and 43 allowed.
3. Claims 7-12, 14-18, 29-34, 36-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is a statement of reasons for the indication of allowable subject matter.

Regarding claims 7, 8, 29, 30, nothing in the prior art of the record teaches or fairly suggests the specific equation for allocating bandwidth, in combination with the other limitations listed in the claims.

Regarding claims 9-12, 31, 32-34, 40, nothing in the prior art of the record teaches or fairly suggests allocating resources on a periodic basis, in combination with the other limitations listed in the claim.

Regarding claims 14, 16, 36, 38, nothing in the prior art of the record teaches or fairly suggests allocating dynamic

Art Unit: 2666

resources by maximizing the sum of the natural logarithms, in combination with the other limitations listed in the claims.

Regarding claims 15, 37, nothing in the prior art of the record teaches or fairly suggests allocating dynamic resources by maximizing the product of all the BEs, in combination with the other limitations listed in the claim.

Regarding claims 17, 18, 20, 39, and 42 nothing in the prior art of the record teaches or fairly suggests allocating static resource in the CAC and allocating dynamic resource in the BoD, in combination with the other limitations listed in the claim.

Response to Arguments

5. Applicant's arguments with respect to claims 1-44 have been considered but are moot in view of the new ground(s) of rejection.

The examiner agrees with the applicant that the rejection in the prior office action was not appropriate. Therefore, a new office action has been submitted.


Art Unit: 2666

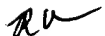
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

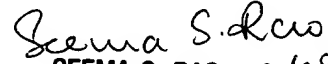
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.


Ronald Abelson
Examiner
Art Unit 2666



February 26, 2003


SEEMA S. RAO 2/28/03
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600